BIOENERGY ACTION PLAN FOR CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION PROGRESS TO PLAN UPDATE June 11. 2007

The Department of Forestry and Fire Protection is pleased to have the opportunity to be represented at this update on the Governor's Bio Energy Action Plan. The Department has been actively involved with promoting the use of forest biomass utilization since the first oil embargo in the 1970's. We have been active Partner's with the California Energy Commission on biomass over the past two decades and have participated in the past efforts to increase the use of biomass in California.

The Department of Forestry and Fire Protection with its mission of Natural Resource Protection has a strong interest in increasing woody biomass utilization. California's forests are overstocked with small trees that are prone to large damaging fire.. Overstocking has also contributed to declining forest health and has predisposed our forests to forest disease and insect infestation that will only become more pronounced as climate change effects begin to play out on these overstocked landscapes. We have already seen examples of the devastation with the outbreak of Sudden Oak Death disease and the insect mortality crisis in Southern California.

A brief summary of our progress on the Governor's Bio Energy Action Plan as follows:

<u>Near-term</u>, we are making consistent and timely progress on establishment of a small cogeneration facility at Parlin Fork Conservation Camp; identification of the most efficient means of harvesting and collecting biomass:

<u>Mid-term</u>, Work on an Urban Forestry Climate Accounting Protocol is intended to be finished in mid 2008. We are collaborating with federal land managers and the Board of Forestry to increase biomass sales. This is an ongoing process and is more clearly discussed in the Board of Forestry presentation.

<u>Longer – term</u>, We will convene a multi-representative work group this year to begin work on defining the parameters for a "biomass management zone". We are just beginning to explore opportunities for establishment of Agro-forests associated with biomass to energy plants.

Following is a more detailed discussion of our progress for the items we are accountable for under this plan:

1. Identify "biomass management zones" in key forest and range areas of California, based on known resource, contribution to the maintenance of forest health, and reduction in large high-intensity wildfires by December, 2007.

Status: The Department has a preliminary biomass inventory run for the State. Interest has been expressed in a working group. Convening a working group to discuss a Biomass Management Zone concept is timely and appropriate. To date, we have utilized a WGA grant to evaluate biomass potential in an area surrounding the Lake Tahoe Basin as a means to test the idea of what would compose a biomass management zone.

2. Determine and update geographic areas in the Urban Interface most in need of fuel reduction by December 31, 2007.

Status: Base data for geographic areas within the Urban Interface were mapped in the 2003 FRAP Assessment. Subsequent to that the Department has prepared fire hazard severity zone maps (high and very high classes) which depict risk of loss during large fires. The Fire Hazard Severity Zone work is being shared with the public for review and comment. Public hearings

are beginning on the maps this month. That work is to be reviewed next year to determine if it is compatible with identification of the high priority fuel treatment areas.

3. Work with ARB and local air districts to evaluate the air quality impacts of wildfire emissions before and after fuel hazard reduction and provide initial findings by December 31, 2008.

Status: The Energy Commission and the Department are partners on two efforts that are attempting to determine the climate benefits of fuel hazard reduction. These projects include the Department of Energy Western Carbon Sequestration Partnership in Shasta County and the US Forest Service Research Project at Alder Springs located in Mendocino County. In these projects a main focus is to evaluate the feasibility of developing a protocol that measures the reduction in wildfire smoke when fuel hazard reduction is applied to a landscape. We look forward to consulting with the ARB and local air districts in greater detail.

4. Build upon the existing California Climate Action Registry protocols and continue development of additional protocols for the forest management and resource conservation and production and use of long-lived wood products by December 31, 2010.

Status: AB 32 has passed and changed how this strategy is progressing. We are currently discussing early adoption of the Forest Protocol with ARB. An Urban Forestry Protocol development project is well underway and an outline for the protocol is drafted. We are working with ARB to convene a technical work group on review of the existing wood products accounting methodology.

5. Work with Department of General Services to install at least three combined heat and power units, using new technologies, at Forestry Conservation Camps at sites located along the California Coast, in the Sierra Nevada range, and in the southern area of California by December 31, 2010.

Status: Preliminary design and calculations for plant capacity has been done for the Parlin Fork Conservation Camp. Initial due diligence has begun for Parlin Fork Conservation Camp. We have begun work with DGS to identify the funding necessary to meet this objective. The initial Parlin Fork material is currently under review by DGS. A grant request is pending with the US Forest Service to obtain funding to continue to the next level of due diligence for the project.

6. Along with Board of Forestry and Fire Protection, collaborate in further development of long-term harvest contracts or agreements with the Federal Land Management Agencies with California land holdings, in close coordination with the U.S. Forest Service, Bureau of Land Management, and the Bureau of Indian Affairs. These efforts would begin by July 31, 2006.

Status: Work is ongoing with the USFS to explore "Stewardship Contracts" to be made available for purchase. A national interagency team has visited California with the intent of making the administrative adjustments necessary to encourage the field level offices (National Forests) to provide larger long-term Stewardship Contracts. This team will also provide individual forests technical assistance in implementing these specialty contracts.

7. Identify and demonstrate the most efficient biomass harvesting systems by January 2010.

Status: The Department has entered into an agreement with the California Biomass Collaborative to conduct a search for the most efficient biomass harvesting, and collection equipment available and report on their findings. There will also be recommendations included as to needs for additional equipment development. Subsequent to identifying this equipment work will begin on development of a demonstration project.

8. Work with the California Department of Food and Agriculture to develop up to four agro-forest projects along with the installation of small (1-5MW) plants by a time range of 2009 to 2015.

Status: Only preliminary work has begun on this project. This will be one of the most complex areas to achieve. There are opportunities with the establishment of salt tolerant species where soil salt concentrations are a current environmental issue.